National Biological Information Infrastructure

Information Technology Initiatives

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National Biological Information Infrastructure

Topics:

- **NBII Overview**
- **Current Challenges within NBII**
- **NBII-2 with Regional Nodes**
- **Sample NBII Content, Tools**

Biological Resources

What is the NBII?:

National Biological Information Infrastructure
The NBII: Building Knowledge Through Partnerships
Click here for information on NBII partnership opportunities
About NBII
What's New
Tools
Standards
User Survey
Postcards
Contact Us
Phone: (703) 648-4205
Fax: (703) 648-4224
E-mail: nbii@nbii.gov
The NBII is an electronic gateway to biological data and information maintained by federal, state, and local government agencies; private sector organizations; and other partners around the nation and the world.
Search the NBII Web
Search NBII Web pages
Search NBII Metadata Clearinghouse
Search a catalog of biological information
Hot Topics
What's hot and upcoming in biological resource information.
Education
Biological information of interest to teachers, students, and others.
Invasive Species
Information relating to non-native plant and animal species present in U.S. ecosystems.
Biodiversity, Systematics, and Collections
Information on descriptions, classification, and scientific collections of biological diversity.
United States
State and national biological information.
International
Biological information sites in other countries.
Programs and Organizations
Biological information from other programs and organizations.
Amphibians
Focus on amphibian declines and deformities.
Pollinators
Coming soon..
Done
Internet zone

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Great Blue Heron - Netscape

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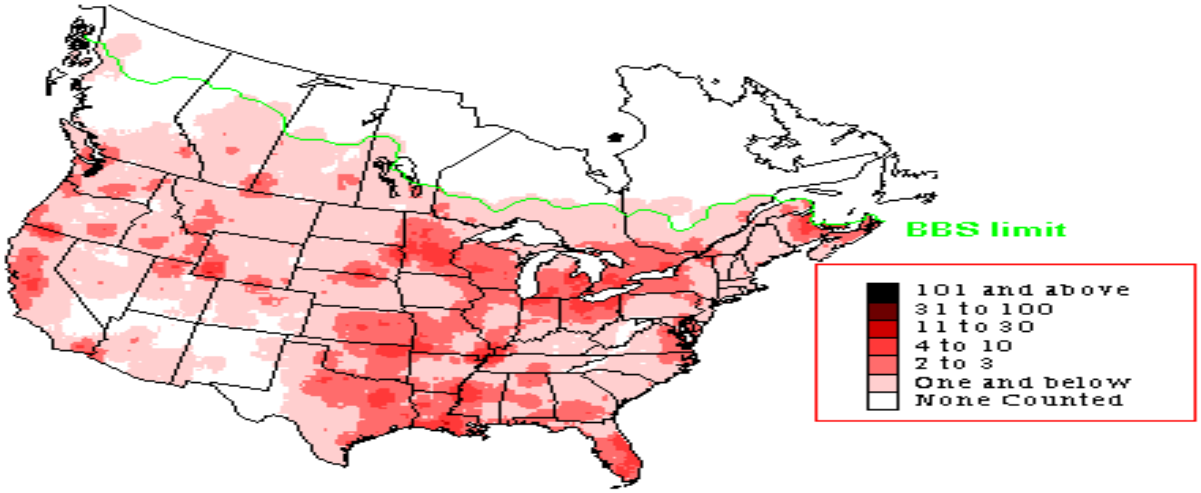
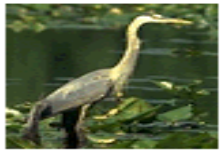
Bookmarks Location: http://www.mbr-pwrc.usgs.gov/bbs/htm96/map617/ra1940.html

USGS Electronic Biological Reso Internet Lookup New&Cool

Great Blue Heron *Ardea herodias*

Summer Distribution Map





Species Information:

- Life History Data
- Identification Tips
- Photograph
- Song
- Breeding Distribution Map (BBS Data)
- Winter Distribution Map (CBC Data)

http://www.mbr-pwrc.usgs.gov/bbs/htm96/map617/ra1940.htm

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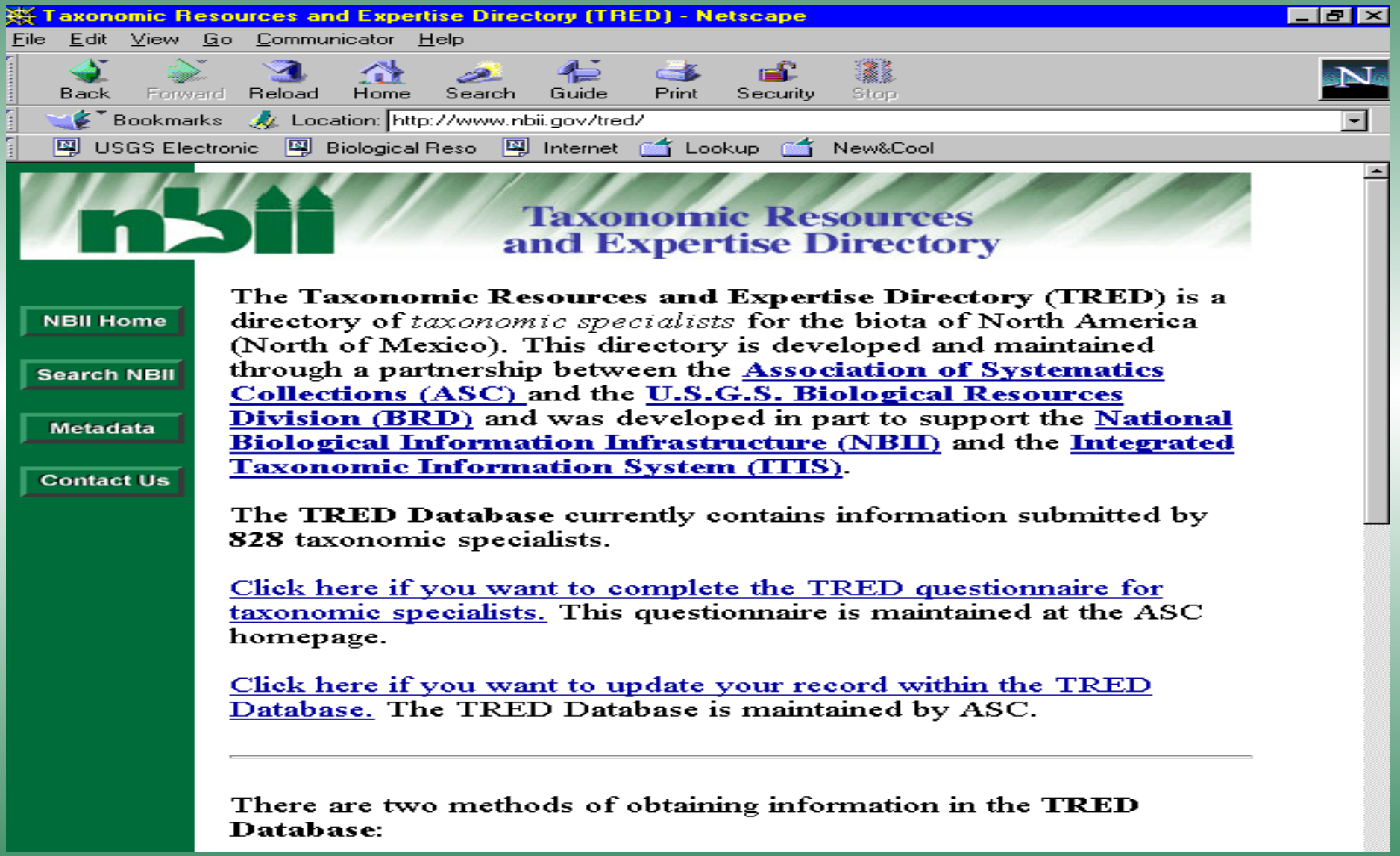
Taxonomic Resources and Expertise Directory (TRED) - Netscape
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Bookmarks Location: http://www.nbii.gov/tred/
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Taxonomic Resources and Expertise Directory
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Metadata
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The Taxonomic Resources and Expertise Directory (TRED) is a directory of taxonomic specialists for the biota of North America (North of Mexico). This directory is developed and maintained through a partnership between the Association of Systematics Collections (ASC) and the U.S.G.S. Biological Resources Division (BRD) and was developed in part to support the National Biological Information Infrastructure (NBII) and the Integrated Taxonomic Information System (ITIS).
The TRED Database currently contains information submitted by 828 taxonomic specialists.
Click here if you want to complete the TRED questionnaire for taxonomic specialists. This questionnaire is maintained at the ASC homepage.
Click here if you want to update your record within the TRED Database. The TRED Database is maintained by ASC.
There are two methods of obtaining information in the TRED Database:

http://www.nbii.gov/

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Tools for Biological Analysis - Netscape
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Metadata
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User Survey
Online Tools for Environmental and Ecological Analysis
These tools provide for online analysis of environmental and ecological data. No downloading or setup of software is involved.
Breeding bird survey and analysis.
Programs for estimating (and plotting) population changes for bird species over space and time and for determining time interval trends, display of annual indices of abundance for any species in any region, and calculation of estimates of mean abundances of bird species.
VegSpec
Creates vegetative practice designs for a variety of sites and vegetative problems.
Stream Segment Temperature Model
Simulates steady-state stream temperatures throughout a dendritic stream network; handles multiple time periods per year.
Fish Spawning Sites in the Sacramento-San Joaquin Estuary
Taxonomic and ecological information on the eggs, larvae and juveniles of 125 species of fish in the Sacramento-San Joaquin estuary and nearby waters.
Biodiversity Species Workshop
Analysis and visualisation of biodiversity. Calculates "biodiversity surfaces" -- probabilistic representations of species' occurrences.
Waste Disposal and Recycling Decision Support System
Decisionmaking regarding recycling and disposal of household and industrial waste in the Monterey Bay area.
WATERSHEDSS
Decision support system for water resources management.
Model Visualization and Analysis
Examination of the relationship between human activities and global climate change, descriptions of integrated assessment models (IAMs), and access to model-generated output.
Return to Main Tools Page

http://www.nbii.gov/tools/online_tools.html

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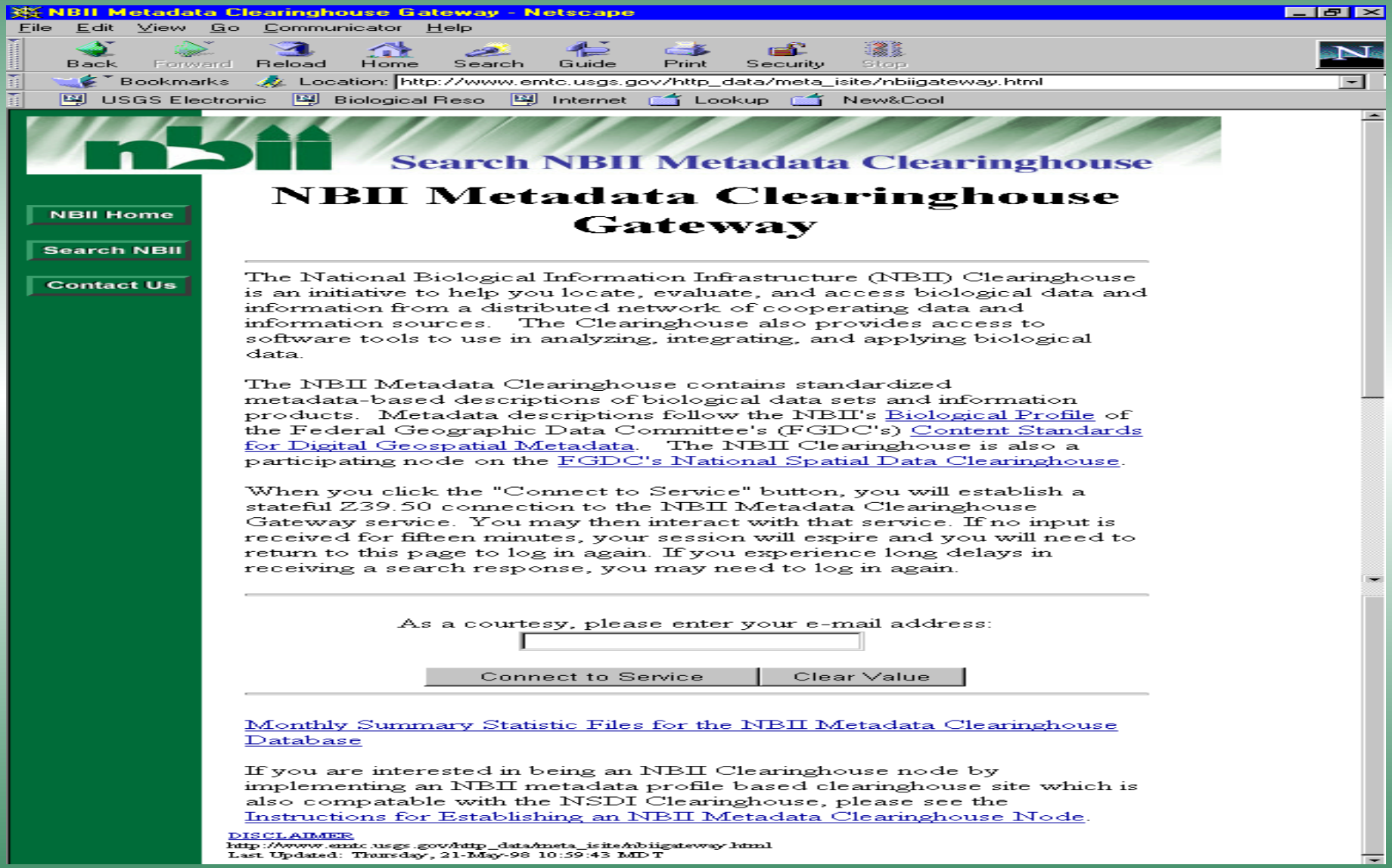
NBII Metadata Clearinghouse Gateway - Netscape
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NBII Metadata Clearinghouse Gateway
The National Biological Information Infrastructure (NBII) Clearinghouse is an initiative to help you locate, evaluate, and access biological data and information from a distributed network of cooperating data and information sources. The Clearinghouse also provides access to software tools to use in analyzing, integrating, and applying biological data.
The NBII Metadata Clearinghouse contains standardized metadata-based descriptions of biological data sets and information products. Metadata descriptions follow the NBII's Biological Profile of the Federal Geographic Data Committee's (FGDC's) Content Standards for Digital Geospatial Metadata. The NBII Clearinghouse is also a participating node on the FGDC's National Spatial Data Clearinghouse.
When you click the "Connect to Service" button, you will establish a stateful Z39.50 connection to the NBII Metadata Clearinghouse Gateway service. You may then interact with that service. If no input is received for fifteen minutes, your session will expire and you will need to return to this page to log in again. If you experience long delays in receiving a search response, you may need to log in again.
As a courtesy, please enter your e-mail address:
Connect to Service
Clear Value
Monthly Summary Statistic Files for the NBII Metadata Clearinghouse Database
If you are interested in being an NBII Clearinghouse node by implementing an NBII metadata profile based clearinghouse site which is also compatable with the NSDI Clearinghouse, please see the Instructions for Establishing an NBII Metadata Clearinghouse Node.
DISCLAIMER
http://www.emtc.usgs.gov/http_data/meta_isite/nbiigateway.html
Last Updated: Thursday, 21-May-98 10:59:43 MDT

http://www.emtc.usgs.gov/http_data/meta_isite/nbiigateway.

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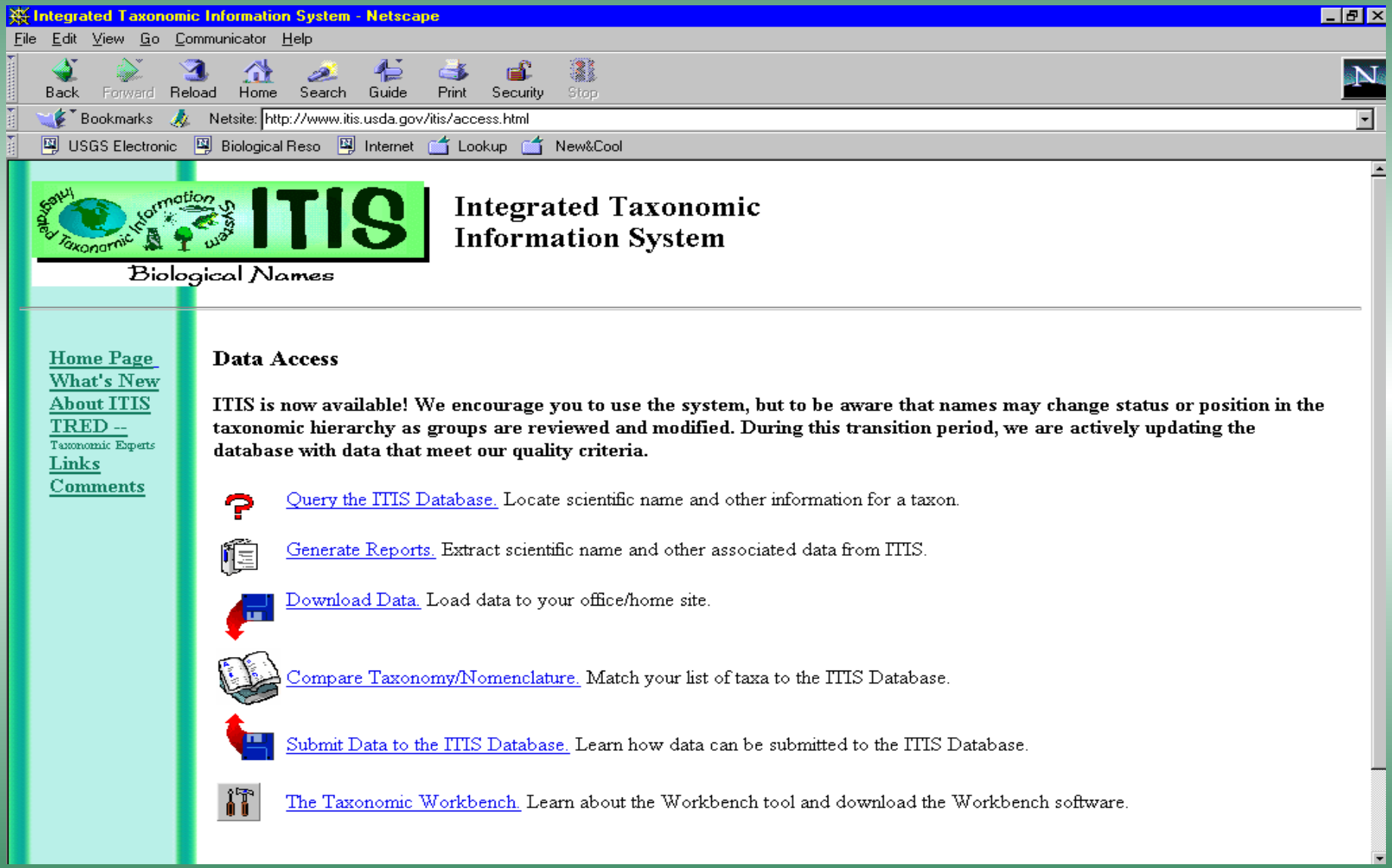
Integrated Taxonomic Information System - Netscape
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Bookmarks Netsite: http://www.itis.usda.gov/itis/access.html
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Integrated Taxonomic Information System
ITIS
Biological Names
Integrated Taxonomic Information System
Home Page
What's New
About ITIS
TRED -- Taxonomic Experts
Links
Comments
Data Access
ITIS is now available! We encourage you to use the system, but to be aware that names may change status or position in the taxonomic hierarchy as groups are reviewed and modified. During this transition period, we are actively updating the database with data that meet our quality criteria.
Query the ITIS Database. Locate scientific name and other information for a taxon.
Generate Reports. Extract scientific name and other associated data from ITIS.
Download Data. Load data to your office/home site.
Compare Taxonomy/Nomenclature. Match your list of taxa to the ITIS Database.
Submit Data to the ITIS Database. Learn how data can be submitted to the ITIS Database.
The Taxonomic Workbench. Learn about the Workbench tool and download the Workbench software.

http://www.itis.usda.gov/itis/access.html

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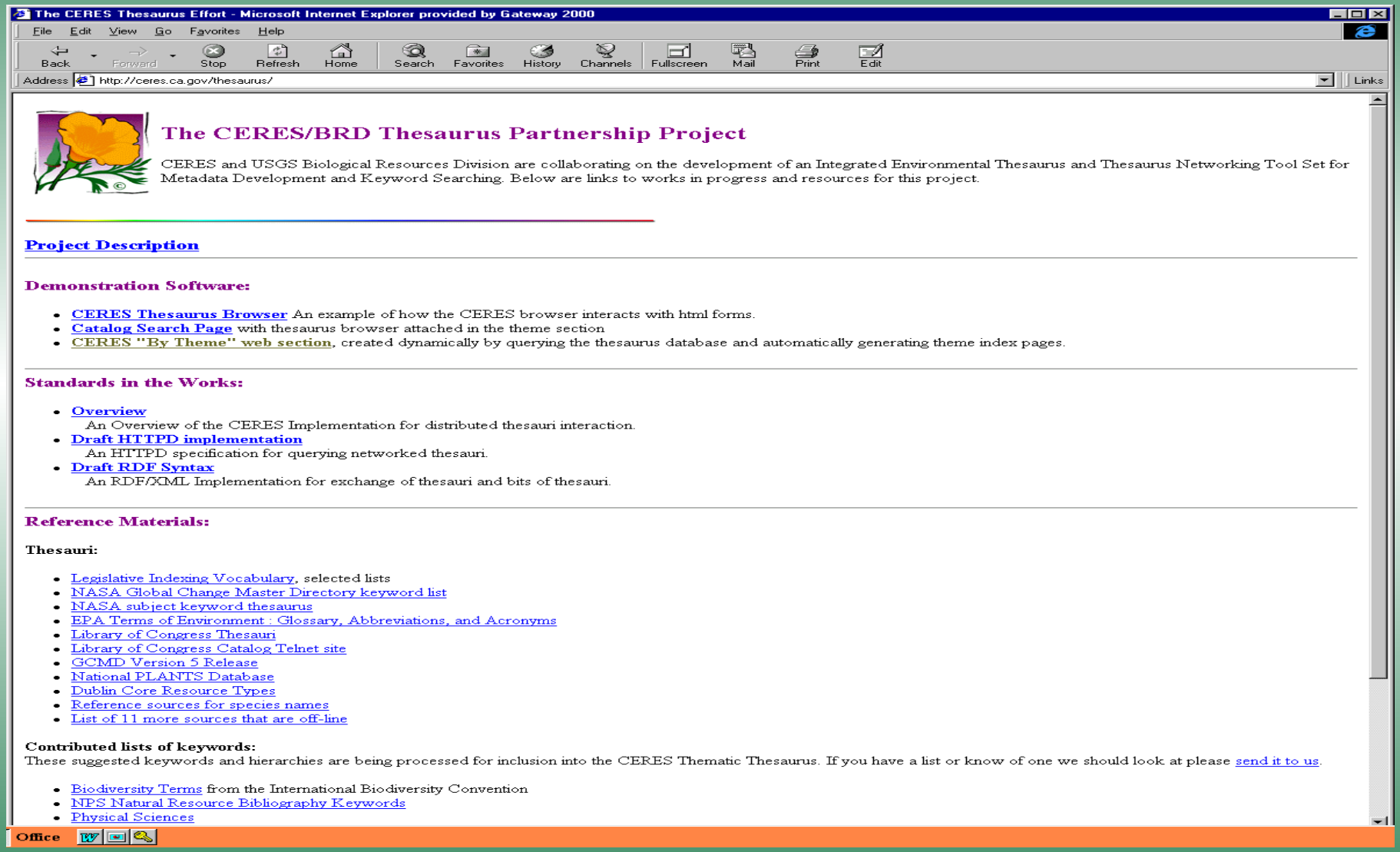
The CERES Thesaurus Effort - Microsoft Internet Explorer provided by Gateway 2000
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Address http://ceres.ca.gov/thesaurus/
Links
The CERES/BRD Thesaurus Partnership Project
CERES and USGS Biological Resources Division are collaborating on the development of an Integrated Environmental Thesaurus and Thesaurus Networking Tool Set for Metadata Development and Keyword Searching. Below are links to works in progress and resources for this project.
Project Description
Demonstration Software:
CERES Thesaurus Browser An example of how the CERES browser interacts with html forms.
Catalog Search Page with thesaurus browser attached in the theme section
CERES "By Theme" web section, created dynamically by querying the thesaurus database and automatically generating theme index pages.
Standards in the Works:
Overview
An Overview of the CERES Implementation for distributed thesauri interaction.
Draft HTTPD implementation
An HTTPD specification for querying networked thesauri.
Draft RDF Syntax
An RDF/XML Implementation for exchange of thesauri and bits of thesauri.
Reference Materials:
Thesauri:
Legislative Indexing Vocabulary, selected lists
NASA Global Change Master Directory keyword list
NASA subject keyword thesaurus
EPA Terms of Environment : Glossary, Abbreviations, and Acronyms
Library of Congress Thesauri
Library of Congress Catalog Telnet site
GCMD Version 5 Release
National PLANTS Database
Dublin Core Resource Types
Reference sources for species names
List of 11 more sources that are off-line
Contributed lists of keywords:
These suggested keywords and hierarchies are being processed for inclusion into the CERES Thematic Thesaurus. If you have a list or know of one we should look at please send it to us.
Biodiversity Terms from the International Biodiversity Convention
NPS Natural Resource Bibliography Keywords
Physical Sciences
Office

http://ceres.ca.gov/thesaurus/

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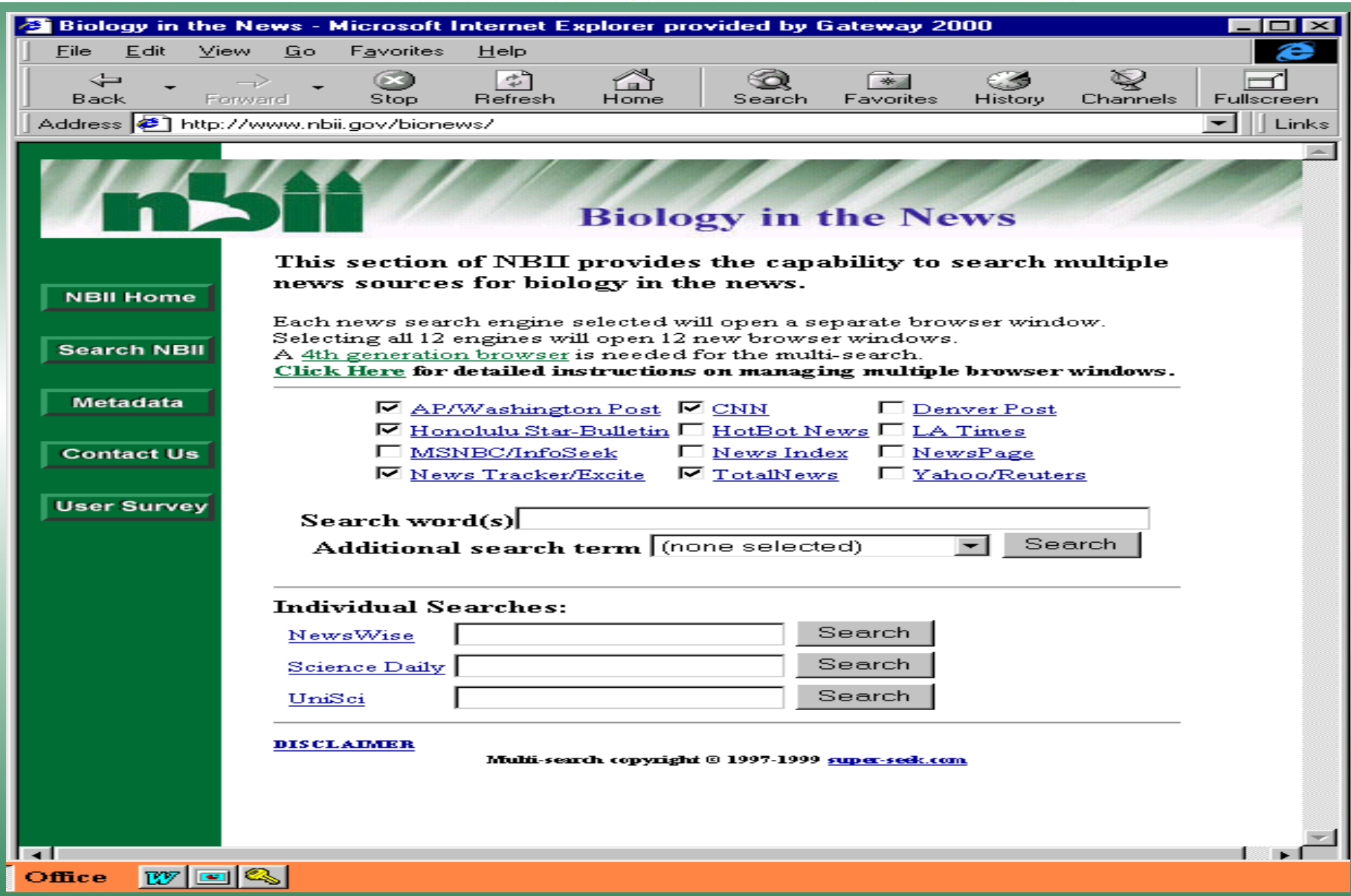
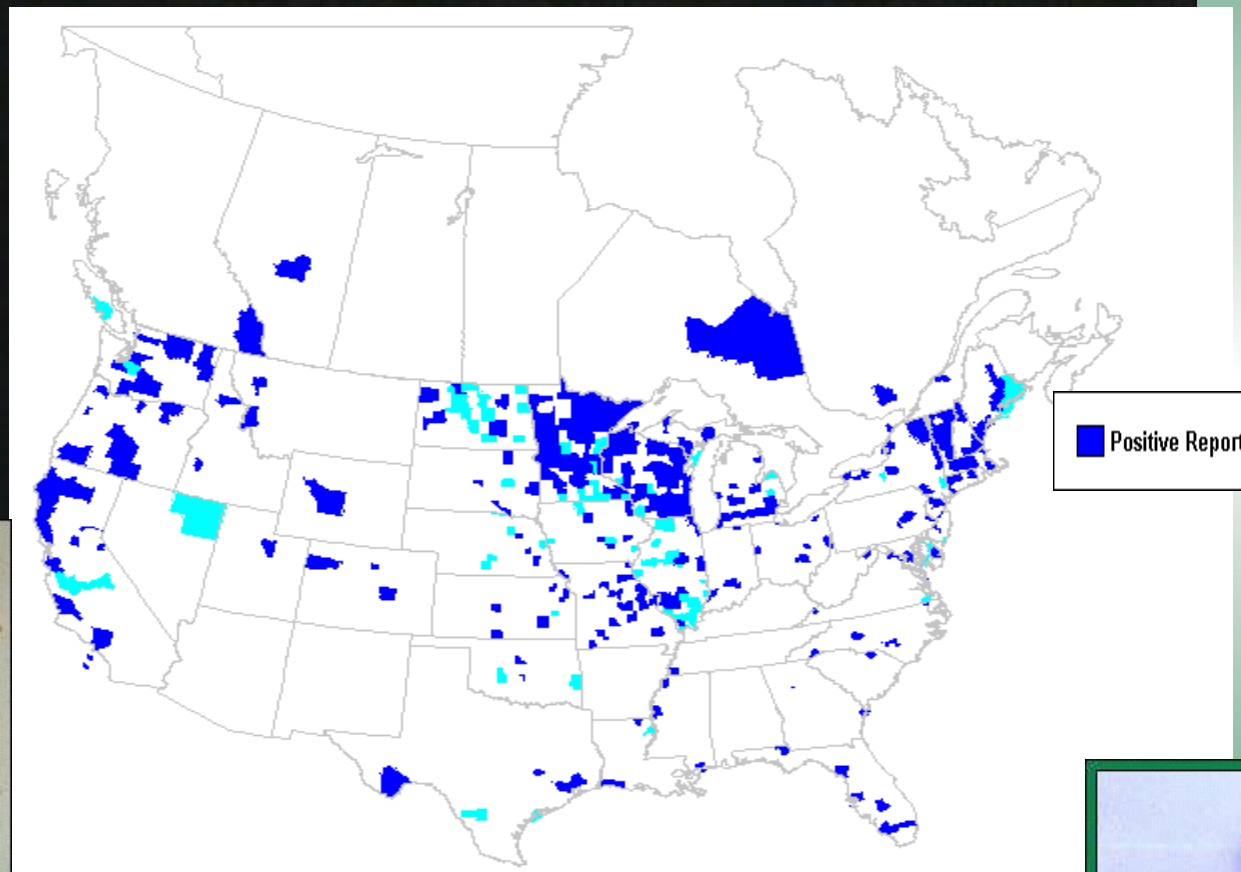


http://www.nbii.gov/bionews

NBII FrogWeb: Amphibian Malformations



Pacific Treefrog *(Hyla regilla)*
Photographed by Stephen B. Ruth

National Biological Information Infrastructure

Current Challenges within NBII:

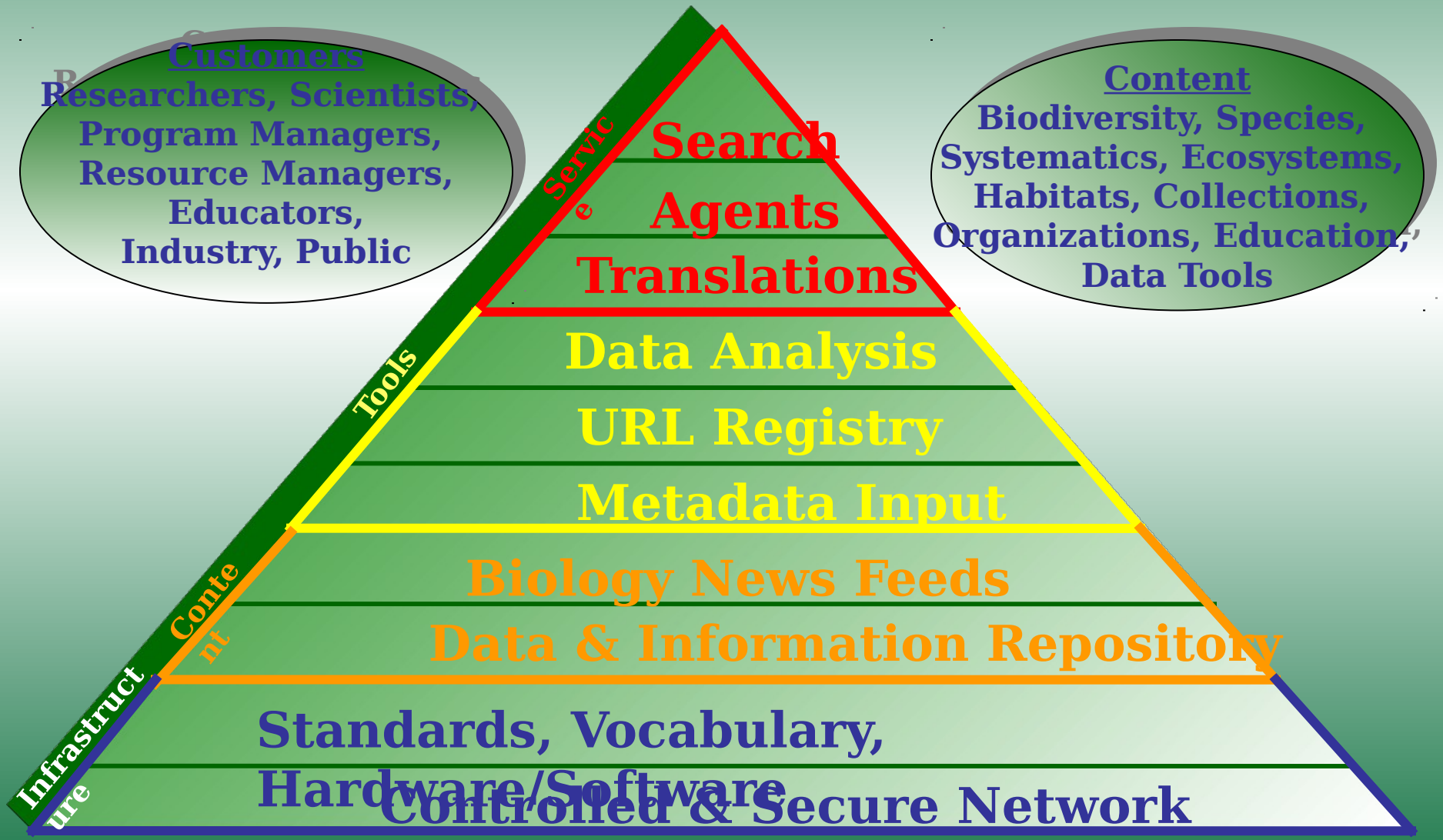
- **Distributed Data Sets**
- **Vast Amounts of Information**
- **National Focus of NBII**
- **Varying Customers & User Capabi**
- **Information Technology Explosion**
- **Limited Resources**

Definition:

NBII is to be considered a *fully digital*, *distributed,* and *interactive system* that allows a vast community of users access to the nations biological holdings.

National Biological Information Infrastructure

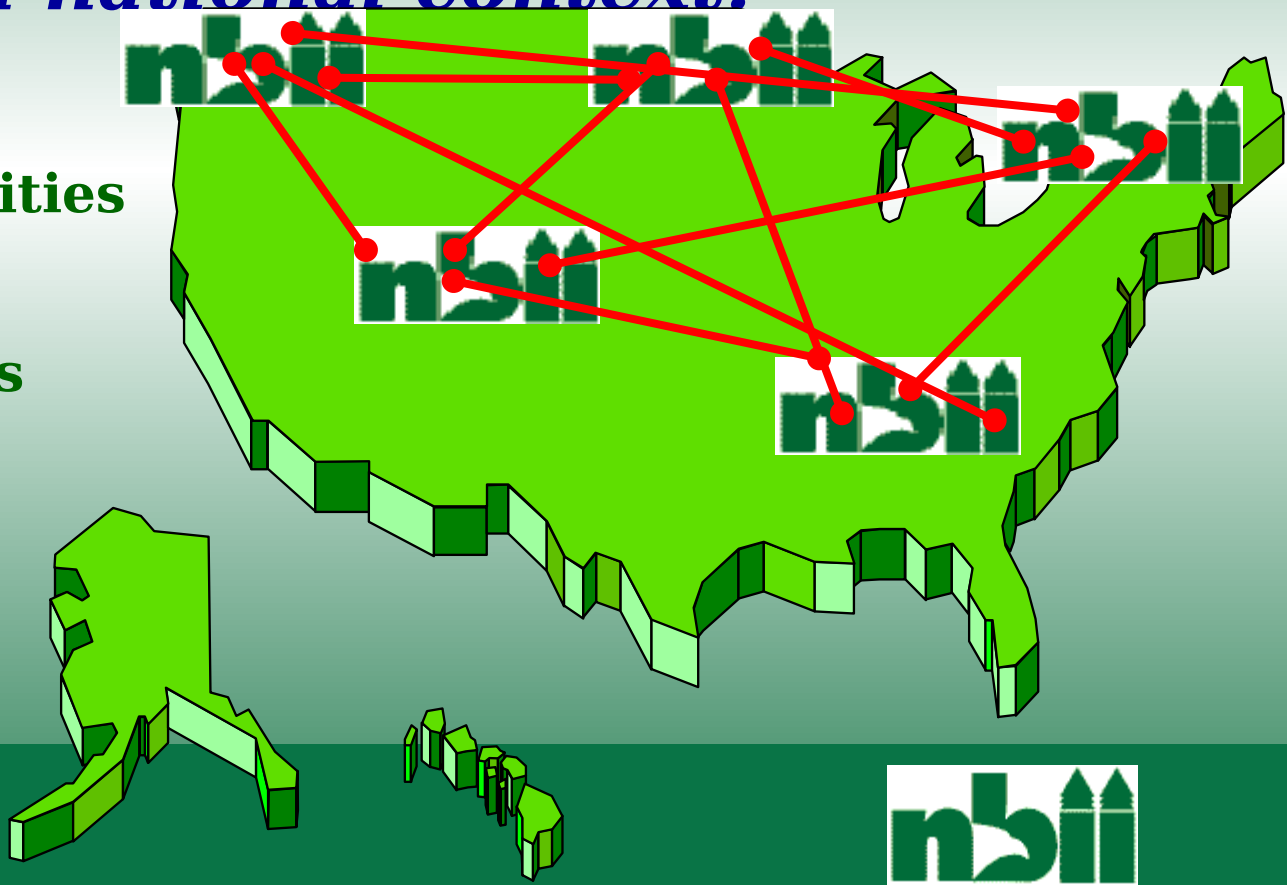
Conceptual Framework:



NBII Regional Nodes: *Integrating local and regional interests in a national context.*

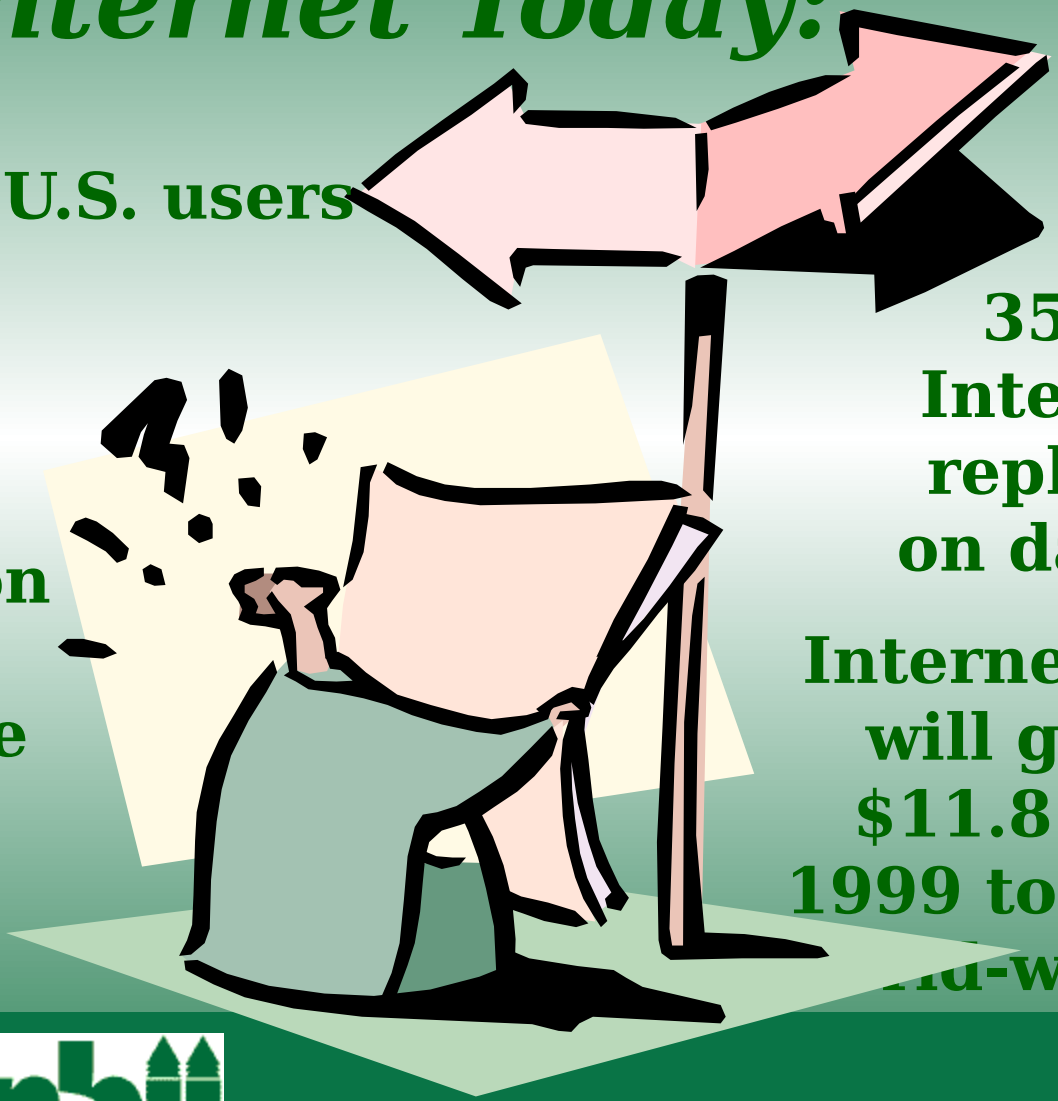
Node activities:

- Analytical capabilities
- Technology support
- Synthesis capabilities
- Data warehousing
- Collaborations
- Training



The Internet Today:

75 million U.S. users



35% said Internet has replaced TV on daily basis

100 million users worldwide

Internet spending will grow from $11.8 billion in 1999 to $43 billion [illegible]-wide in 2002

Source: Cyberlok Technolog

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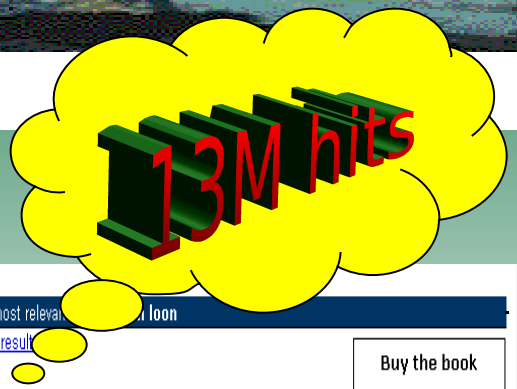
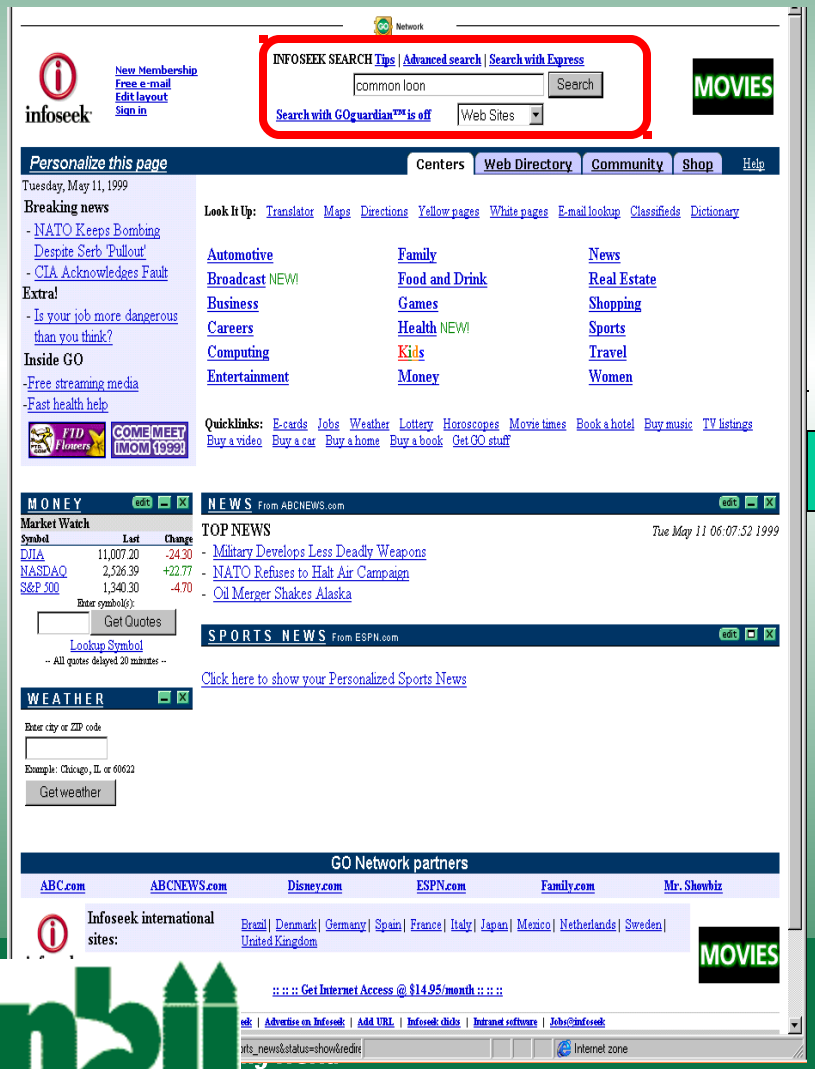
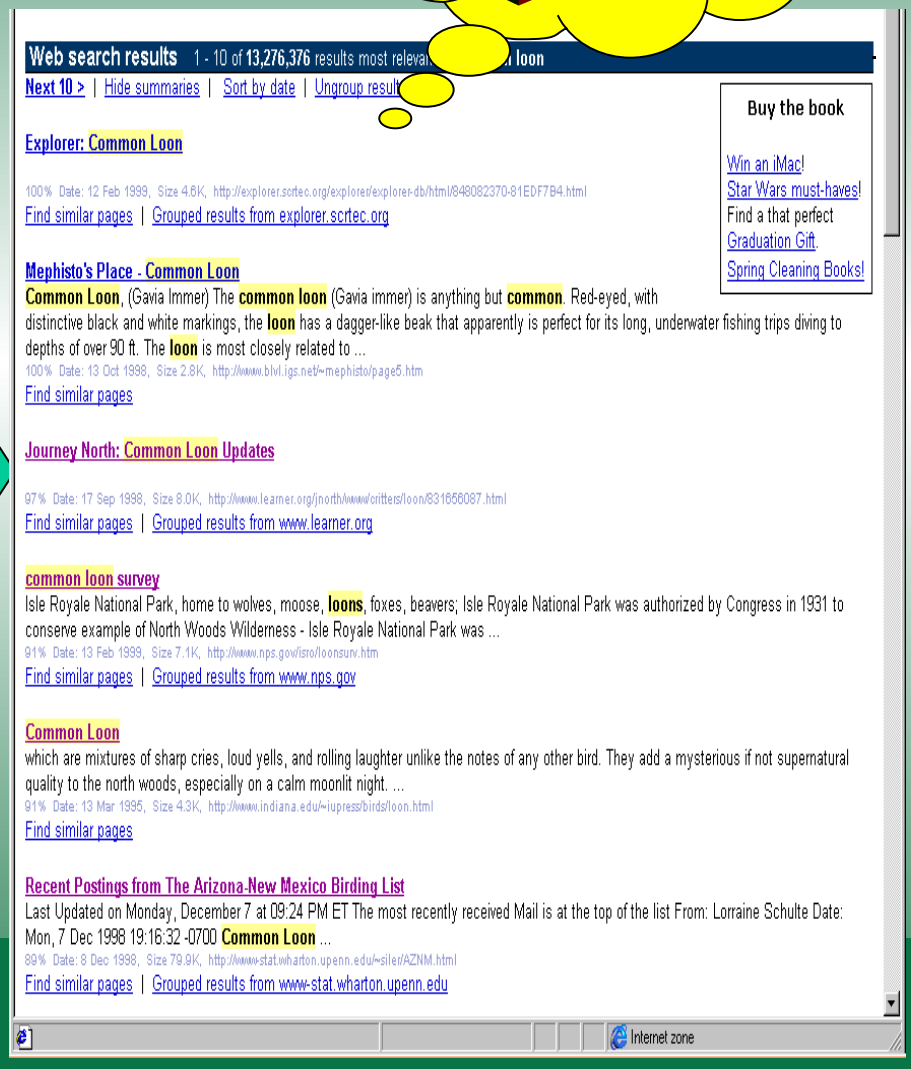
Biological Resources

Typical Search:






Web search results 1 - 10 of 13,276,376 results most relevant for common loon
Next 10 > | Hide summaries | Sort by date | Ungroup results
Buy the book
Win an iMac!
Star Wars must-haves!
Find a that perfect Graduation Gift.
Spring Cleaning Books!
Explorer: Common Loon
100% Date: 12 Feb 1999, Size 4.6K, http://explorer.sortec.org/explorer/explorer-db/html/848082370-81EDF7B4.html
Find similar pages | Grouped results from explorer.sortec.org
Mephisto's Place - Common Loon
Common Loon, (Gavia Immer) The common loon (Gavia immer) is anything but common. Red-eyed, with distinctive black and white markings, the loon has a dagger-like beak that apparently is perfect for its long, underwater fishing trips diving to depths of over 90 ft. The loon is most closely related to ...
100% Date: 13 Oct 1998, Size 2.8K, http://www.blvl.igs.net/~mephisto/page5.htm
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Journey North: Common Loon Updates
97% Date: 17 Sep 1998, Size 8.0K, http://www.learner.org/jnorth/www/critters/loon/831656087.html
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common loon survey
Isle Royale National Park, home to wolves, moose, loons, foxes, beavers; Isle Royale National Park was authorized by Congress in 1931 to conserve example of North Woods Wilderness - Isle Royale National Park was ...
91% Date: 13 Feb 1999, Size 7.1K, http://www.nps.gov/isro/loonsurv.htm
Find similar pages | Grouped results from www.nps.gov
Common Loon
which are mixtures of sharp cries, loud yells, and rolling laughter unlike the notes of any other bird. They add a mysterious if not supernatural quality to the north woods, especially on a calm moonlit night. ...
91% Date: 13 Mar 1995, Size 4.3K, http://www.indiana.edu/~iupress/birds/loon.html
Find similar pages
Recent Postings from The Arizona-New Mexico Birding List
Last Updated on Monday, December 7 at 09:24 PM ET The most recently received Mail is at the top of the list From: Lorraine Schulte Date: Mon, 7 Dec 1998 19:16:32 -0700 Common Loon ...
89% Date: 8 Dec 1998, Size 79.9K, http://www-stat.wharton.upenn.edu/~siler/AZNM.html
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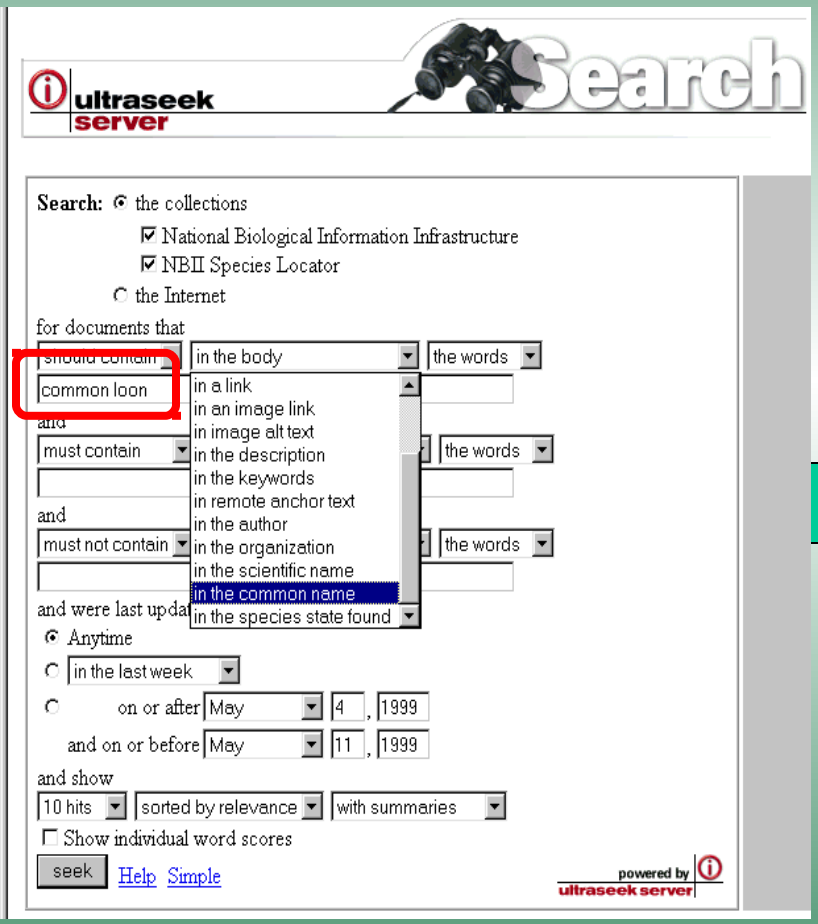
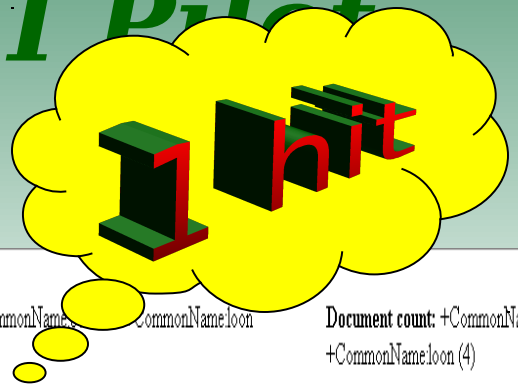
Same Search NBII Pilot





Results for: +CommonName:common +CommonName:loon
Document count: +CommonName:common (17)
+CommonName:loon (4)
1 results found, sorted by relevance
sort by date
hide summaries
1-1
Common Loon
43%
A presentation of bird photographs, songs, identification tips, distribution maps, and life history information for North American birds, and a forum for commentary and discussion on birds.
16 Feb 99
Find Similar
http://www.mbr-pwrc.usgs.gov/id/framlsth0070id.html - size 1.3K - NBII Species Locator
Try this query on the entire Web.
sort by date
hide summaries
1-1
Internet zone

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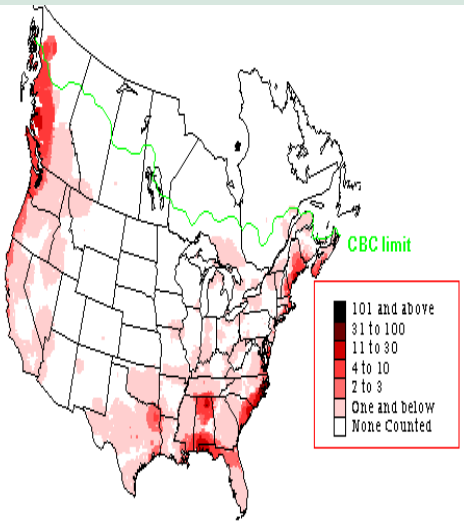
Biological Resources

Pilot Results:



USGS
- ID Tips
- Life History
- BBS Map
- CBC Map
- Animated Map
- Song
- Taxonomy (ITIS)
- Print Version
- Glossary
- Submit your comments
- Help
- Back to List

Common loon *Gavia immer*

Identification Tips:

- Length: 24 inches Wingspan: 58 inches
- Sexes similar
- Large diving bird with long body that rides low in the water
- Large bill is straight, tapers to a point, and is held horizontally
- Feet set far back on body, and trail behind body in flight
- Upperwings wholly dark in flight

Adult breeding:

- Black bill
- Black head
- Black neck with white markings
- White chest and belly
- Black back with white checkering and spotting

Adult nonbreeding:

- Pale gray bill
- Gray-brown cap, forehead, nape, hindneck and back
- White face, eye ring, chin, throat, foreneck and belly
- Jagged border between white foreneck and dark hindneck

Adult breeding

Adult nonbreeding

Done | Internet zone

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Building Knowledge Through Partnerships

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